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3/12/03

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,342	03/29/2000	Mark O. Vogel	99,818	6188

20306 7590 03/12/2003

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EXAMINER

BELIVEAU, SCOTT E

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

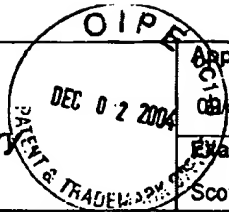
DOCKETED

MAR 18 2003

DUE DATE: 5/12/03

BY: KB CT

Office Action Summary



Application No.

0538,342

Appl. (s)

VOGEL ET AL.

Examiner

Scott Beliveau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-32 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3-7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 45 (Page 9, Line 12), 218. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The use of several trademarked corporate names have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology if applicable. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.
3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (Page 7, Line 21; Page 12, Line 5). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.
4. The disclosure is objected to because of the following informalities:
 - Reference to the “downstream channel identifier field 120” should be amended to refer to the “downstream channel identifier field 134” (Page 24, Line 5);

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- Reference to the “TLV encoded ranging information field 124” should be amended to refer to the “TLV encoded ranging information field 146” (Page 26, Line 7).

Appropriate correction is required.

Allowable Subject Matter

5. Claims 1-32 are allowed.

6. The following is an examiner’s statement of reasons for allowance:

The art of record either alone or in combination does not teach or suggest the two aspects of the present invention such that the “cable modem begins ranging at the initial transmit level”.

The first aspect, recited in claims 1, 16, and 28, describes a method for estimating an initial transmit level based on the comparison of a “characteristic value” transmitted to the cable modem and a “measured signal level of a downstream channel a the cable modem”. The second aspect, recited in claims 10, 21, and 30, describes a method for adjusting an initial transmit level based on an implementation delta value.

As to the closest art of record, the DOCSIS “Radio Frequency Interface Specification (Interim Specification) SP-RFIV1.1-I06-001215” cited by the application, details the cable modem ranging process. The cable modem receives upstream transmission parameters and other configuration information via a Upstream Channel Descriptor (UDC) message (Section 7.2.2). The reference, however, does not suggest or disclose that this configuration information comprises a “characteristic value” for determining the initial transmit power level. Rather, standard discloses that the cable modem uses either a “minimum specified

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transmit power level” or one available from the cable modem non-volatile storage (Section 7.2.4.1) that is adjusted based on “delta” information transmitted from the CMTS (Section 6.3.2.5).

The Chiu et al. (US Pat no. 5,784,597) reference suggests that the cable modem initially transmits using an average power setting which is communicated by the headend (Col 26, Lines 9-26). While one of ordinary art might presume that this information may be transmitted as outlined in the DOCSIS standard via the UDC, the reference provides no further suggestion that the cable modem may utilize this information in conjunction with the “signal level of the downstream channel” so as to establish the “initial transmit level”.

The Palm (WO 00/67385) reference discloses a method wherein transmission parameter device communications initial power levels are determined and communicated to downstream devices including cable modems. This application claims priority to a number of US provisional applications that would qualify as prior art under 35 U.S.C 102 if patented. However, the cited reference does not qualify as prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows.

- The Chiu et al. (US Pat no. 5,784,597) reference discloses a method for initializing a cable modem such that the cable modem initially transmits using the average power setting as communicated by the headend (Col 26, Lines 9-26).
- The Palm (WO 00/67385) reference discloses an apparatus and method for determining transmission parameters while initializing a communication link.
- The Leano et al. (US Pat No. 6,453,472) reference discloses a method for performing periodic ranging of cable modems that includes the transmission of instructions for adjusting power levels.
- The Nazarathy et al. (US Pat No. 6,490,727) reference describes a hybrid fiber coaxial (HFC) network wherein a CMTS uses DOCSIS and DVB-RC standards to implement distributed calibration and synchronization techniques.
- The Burns et al. (US Pat No. 6,449,291) reference discloses a method and apparatus for time synchronization during the cable modem ranging process.
- The Grimwood et al. (US Pat No. 6,243,369) reference discloses a method and apparatus for synchronizing cable modems wherein an initial timing offset calculation is performed before starting the ranging process so as to reduce the number of iterations.

This application is in condition for allowance except for the following formal matters:

- Objections to Drawings;
- Objections to Specification.

Prosecution on the merits is closed in accordance with the practice under *Ex parte*

Quayle, 1935 C.D. 11, 453 O.G. 213.

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A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 703-305-4907. The examiner can normally be reached on Monday-Friday from 8:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 703-305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

SEB
March 6, 2003


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600